

4

**Patent** [19]

[11] Patent Number: 11239717

[45] Date of Patent: Sep. 07, 1999

---

## [54] METHOD AND APPARATUS FOR PURIFICATION

[21] Appl. No.: 10043497 JP10043497 JP

[22] Filed: Feb. 25, 1998

[51] Int. CL<sup>6</sup> B01D05386 ; B01J03502; C02F00130; C02F00172

## [57] ABSTRACT

**PROBLEM TO BE SOLVED:** To provide a method for improving the irradiation ratio of light to a photocatalyst, for elevating purification efficiency, and for purifying sewage and a large amount of industrial waste such as flue gas of an incinerator and a purification apparatus for the method.

**SOLUTION:** A purification apparatus has an inflow surface 5 having an inflow ports 7 into which a raw material 9 is introduced, an outflow surface 6 having outflow ports 8 from which the raw material 9 is discharged, holes 3 for connecting the inflow ports 7 with the outflow ports 8, a light transmitting porous body 2 which incident light enters across the extension direction of the holes 3, and a photocatalyst which is placed on the inflow surface 5 and the outflow surface 6 in the porous body and on the inner wall surfaces of the holes 3 and activated by the incident light.

\*\*\*\*\*